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KEY  
TO THE  
PUBLICATIONS OF THE UNITED STATES CENSUS,  
1790-1887.

## P R E F A C E .

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Much has been done in recent years to develop a popular interest in statistics by the introduction of maps, charts, diagrams, and graphic illustrations of every sort. But the "unlovely work of statistics," as Mr. Carroll D. Wright terms it, needs to be simplified in every possible way; and one of the best ways is found in the direction of indexical aids. The forty-two volumes of the United States Census, although worked with rich results by some delvers in statistical mines, seem not to be rated at their full value by many inquirers. There is such a mass of material here that the average student shrinks from the task of sifting from this embarrassment of riches the particular treasure desired. In the hope of making these volumes somewhat less formidable, — of encouraging, perhaps, a more abundant use of their resources, — the following pages have been prepared. I cannot hope to have furnished here the most efficient weapon possible with which to attack the United States census; to make a complete index to these 25,000 pages, more or less, closely packed with statistical matter and fairly bristling with tabular systems, would be an achievement far greater than any effected or even attempted here; and the highest ambition of these pages will be realized if they serve to make the revelations of the census a little clearer, if they facilitate a larger use of that work, if they help to make these statistics, at least, a little less "unlovely."

This work, it is proper to add, has been done in connection with the Graduate Department of Harvard College, in a course conducted by Dr. Albert Bushnell Hart, to whom I am under especial obligation as regards both the design and the execution of this work.

EDWARD C. LUNT.

CAMBRIDGE, June, 1888.

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## I.

### History of the United States Census.

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A distinguished French statistician, Moreau de Jonnés, declares that the "United States presents, in its history, a phenomenon which has no parallel. It is that of a people who instituted the statistics of their country on the very day when they founded their government, and who regulated, in the same instrument, the census of the citizens, their civil and political rights, and the destinies of the country." Flattering as this statement is to the prophetic insight and the philosophic depth of mind of the "Fathers of the Republic," De Jonnés's eulogium will hardly stand the test of critical examination. The "statistics of the country" that the American founders had in mind were of the most meagre description, and had no scientific pretensions whatever. Moreover, the census was undertaken here not, as the French writer's enthusiasm would imply, in deference to the claims of statistical science, but simply as a political necessity. This is shown by Madison's account of the debates in the Convention. Concluding, after long consideration, that taxation and representation could best be apportioned according to population, the Convention embodied its decision in the Constitution in the following familiar clause:—

"Representatives and direct taxes shall be apportioned among the several States which may be included within this Union according to their respective numbers, which shall be determined by adding to the whole number of free persons, including those bound to serve for a term of years, and excluding Indians not taxed, three fifths of all other persons. The actual enumeration shall be made within three

years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct.”<sup>1</sup>

In accordance with this clause of the Constitution an Act<sup>2</sup> was passed in the second session of the first Congress providing for taking a census of the inhabitants of the United States. “Taking a census” is, perhaps, rather an ambitious way of putting it, since the Act in question provides only for an enumeration of the inhabitants. This was consistent with the organic law, which, as we saw, contemplated only political ends. But even in this first Act the process of going beyond the strict requirements of the Constitution, afterward so far developed, was already begun, for the marshals of the several districts, in taking the enumeration, were required to classify the population under these six heads: 1, names of heads of families; 2, free white males of sixteen years and upward; 3, free white males under sixteen years; 4, free white females, including heads of families; 5, all other free persons; 6, slaves.

As the census law of 1790 was the model for subsequent legislation on the subject up to 1850, we shall do well to examine carefully the leading provisions of the law. The marshals of the several United States districts had charge of the enumeration, appointing such assistants as seemed to them necessary. Both marshals and assistants were required to take an oath prescribed in the Act. The enumeration was to commence on the first Monday in August, 1790, and was to close in nine months thereafter. A penalty of \$200 was prescribed for assistants who failed to make returns, or who made false returns. Marshals were to file their returns with the clerks of the district courts for careful preservation, and to transmit to the President of the United States the aggregate amount of each description of persons within their

<sup>1</sup> Article I, Sec. 2.

<sup>2</sup> Statutes at Large, I, 101; for extension of the Act to Rhode Island and to Vermont, see Statutes, I, 129 and 197.



respective districts. Before making his return to the marshal each assistant was required to sign and to have set up "for the inspection of all concerned," at two of the most public places within his division, a correct copy of the schedule. The assistant received two dollars for each of these copies until 1830, and after that date five dollars. Every person more than sixteen years of age was required to give the assistant any necessary information in his possession, and refusal to do this involved a penalty of \$20, half of which went to the assistant. At this time the general supervision of the census was not committed to any one executive department, the only provision about the final disposition of the returns being that they should be sent to the President of the United States. The compensation of assistants, aside from such accidental emoluments as might come in the ways described above, was fixed at one dollar for every 150 persons returned; but in scattered communities the marshals and judges might increase this compensation so as not to exceed one dollar for every fifty persons. The marshals received a fixed sum, varying with the extent of the State, from \$100 to \$500.

The result of this legislation is a small, unpretentious octavo pamphlet of fifty-six pages, published in 1791. The census-takers seem to have done their work well, considering the novelty of the experiment, and to have given a trustworthy account of the numbers of the various classes of people in the country at that time. But the people of that early date, as in later times, exercised to the full their inherent right to grumble at the work of legislators. "To count," says Dr. Johnson, "is a modern practice; the ancient method was to guess;" and the ambitious people of the young republic seemed to have guessed much too high. On every side loud complaints were heard, both of the results of the census and of the methods used. In sending abroad copies of the first census, President Jefferson was at some pains to point out the deficiencies of the work

and to supply omissions. The cost of the first census was \$44,377.28.<sup>3</sup>

There is little in the history of the first census of the United States, it must be admitted, to justify any such laudation as De Jonnés bestows upon us; but in certain unofficial documents connected with the second census we find indications of an enlightened interest in statistical science and a full appreciation of the possibilities of census-taking provided in the national constitution. Two learned societies memorialized Congress on the subject of the second census. The American Philosophical Society, through its president, Thomas Jefferson, respectfully showed Congress that the new census offered an occasion of great value, not otherwise to be obtained, of ascertaining sundry facts highly important to society; and they begged leave respectfully to submit to the wisdom of the legislature the expediency of requiring from the census more detailed views about the United States, under several different aspects. They deemed it important to determine the effect of the soil and the climate of the country upon the inhabitants thereof, and humbly suggested certain means to this end. For the purpose of distinguishing exactly the increase of population by birth and immigration, they proposed that one table should present, in separate columns, the respective numbers of native citizens, citizens of foreign birth, and aliens. In order to have a curious and useful document of the distribution of society in these States, they proposed that in another table the number of free male inhabitants engaged in business should be specified under certain suggested descriptions, or under such other descriptions as the greater wisdom of the legislature might approve. Flattering themselves that truth would result very satisfactorily to the citizens from these data, the society submitted their views to the superior wisdom of Congress, ready to acquiesce in its decision with unqualified respect.

<sup>3</sup> 7, viii; 7, Comp., 29; Encyc. Brit., V, 340.

On the same day, January 10, 1800, another memorial was presented to Congress from the Connecticut Academy of Arts and Sciences, of which Timothy Dwight was president. This society deemed it an object very interesting to a young and flourishing republic to become acquainted with its own natural history, and especially with whatever regarded the origin and prosperity of its population. The memorialists could not but believe that the legislature of this extensive country would consider these objects very interesting in a scientific view, and well calculated to answer valuable purposes in civil economy. For the accomplishment of these and other scientific objects, the memorialists begged leave to request their honors to direct by law that the next census of the inhabitants of the United States might comprehend much more exactly analyses of the population with respect to age, might indicate the number of persons not born in the United States, the number of persons in each leading occupation, the number of married persons, of widows, and so on. Having in contemplation the collection of material for a complete view of the natural history of man and society in the country, the memorialists had full confidence that their honors would cheerfully lend the aid of legislative provisions to such extent as might be demanded to attain so desirable an object.

This confidence, however, was sadly misplaced, for their honors, after referring this memorial to the appropriate committee, never again, so far as appears from the written record, concerned themselves at all with the wishes of the learned societies. The committee charged with preparing a law for taking the second census, although instructed to make a report, seems never to have done so; and the humbly couched petitions of the memorialists apparently fell upon the deafest kind of ears. But private zeal for scientific attainments is ever in advance of governmental patronage of learning, and the national law-makers of 1800 had so many immediate practical ends to meet that one can easily

understand and perhaps excuse their neglect of so remotely beneficial an enterprise as a thorough-going census. The wonder is, rather, that there should have been anywhere in the country, at that early day, so many public-spirited citizens alive to the importance of statistical science in the arts of administration, and quick to seize upon the constitutional instrument for the attainment of their object.

The law<sup>4</sup> for taking the second census, approved February 28, 1800, followed closely the lines of the former Act. The work was to be done, as in the first census, by the United States marshals and assistants; and they were given, as before, nine months in which to make returns. Oaths and penalties are prescribed, as in the Act of 1790; and the old features of posting schedules in public places and filing returns with the clerks of courts are retained, except that in this case the aggregate returns are sent not to the President, but to the Secretary of State, under whose general supervision the census is taken from this time until 1850. The most important change in the new law consisted in the enlargement of the population schedule, which now registered the name of the county, parish, etc., where the family resided, the name of head of family, free white males under ten years of age, free white males of ten and under sixteen, free white males of twenty-six and under forty-five, free white males of forty-five and upward, duplication of the last five inquiries with regard to females; all other free persons except Indians not taxed; and slaves.

The results of the second census were published by Madison (Secretary of State) in December, 1801, in a folio volume of seventy pages, somewhat more imposing in form than the pamphlet of 1791. The cost of the second census was \$66,109.04.<sup>5</sup>

In 1810 the scope of the census was enlarged, and the first attempt was made to get a statement of the industrial statis-

<sup>4</sup> Statutes at Large, II, 11.

<sup>5</sup> 7, viii; 7, Comp., 29; Encyc. Brit., V, 340.

tics of the country. An Act,<sup>6</sup> approved March 26, 1810, differed only in minor details from the Act of 1800, and made no provision for statistics other than those relating to population. But an Act,<sup>7</sup> approved May 1, 1810, after amending the former Act by prescribing a different form of oath, goes on to instruct the census-taker to report, under the direction of the Secretary of the Treasury, and according to such instructions as he might give, the several manufacturing establishments within their districts. No industrial schedule was yet incorporated into the law, this matter being left to the discretion of the Secretary of the Treasury. The results of these inquiries were to be sent to that official, the population returns, taken with a schedule exactly like that of 1800, going as before to the Secretary of State. A comparison of the dates of these two Acts seems to indicate that the idea of extending the scope of the census was an after-thought, and the inefficient organization of that branch of the service made the results of slight value. The schedule provided by the Secretary of the Treasury produced only an ill-assorted aggregation of unattached and unconnected items. The Act of March 26 allowed marshals nine months in which to make their returns ; but what Gen. Walker calls "the essential viciousness of a protracted enumeration" begins to be recognized now, and about two weeks later an amendatory Act<sup>8</sup> is passed, reducing the period of enumeration to five months. This time, however, was found insufficient, and we find on the statute books another Act<sup>9</sup> amendatory of the amending Act, and extending the time for completing the census until June 1, 1811.

The results of this census are contained in two volumes, one on Population and the other on Manufactures. The cost of the third census was \$178,444.67.<sup>10</sup>

The legislation for the census of 1820, embodied in the

<sup>6</sup> Statutes at Large, II, 564.

<sup>7</sup> Statutes at Large, II, 605.

<sup>8</sup> Statutes at Large, II, 570.

<sup>9</sup> Statutes at Large, II, 658.

<sup>10</sup> 7, viii ; 7, Comp., 29 ; Encyc. Brit., V, 340.

Act<sup>11</sup> of March 14 of that year, presents few new features. The population schedule undergoes a little more refinement, discriminating now between foreigners naturalized and not naturalized, and dissecting more minutely with respect to age the free colored and the slave population. Mindful of the unhappy experience of the previous decade, the lawgivers of 1820 sought to reach the golden mean by making the period of enumeration six calendar months; but here again they were too ambitious, and an Act<sup>12</sup> of March, 1821, extends the time until September 1 of that year, thus making the total period of enumeration thirteen months. Hitherto a penalty has always been imposed upon assistants for neglect of duty, and now the same offence on the part of a marshal is attended with a forfeiture of \$1000, one half going to the United States and the other half to the informer. As in the previous Act, account is to be taken, under the direction, this time, of the Secretary of State, and in such forms as he should prescribe, of the manufacturing establishments in each district. In 1810 this feature of the census, as we saw, came to little, and the same thing is true of the fourth census. In the latter case the fault seems to lie with the census-takers rather than in the machinery provided for them, devised, presumably, by John Quincy Adams, the Secretary of State; for this, in the matter, at least, of scientific arrangement and proper classification, discovers more statistical talent than the schedule adopted by Gallatin ten years before. Now, for the first time, a provision is inserted in the law requiring the Secretary of State to have printed 1500 copies of the returns for the use of Congress; and a later resolution<sup>13</sup> of Congress provides for the distribution of these copies, directing, among other things, that the Secretary of State shall send one copy to each college and university in the country.

The results of the fourth census are contained once more

<sup>11</sup> Statutes at Large, III, 548.

<sup>12</sup> Statutes at Large, III, 643.

<sup>13</sup> Statutes at Large, III, 719.

in two volumes, one on Population, published in 1821, and the other on Manufactures, published in 1823. The cost of the fourth census was \$208,525.99.<sup>14</sup>

So indifferent had been the success of the third and fourth censuses, in the matter of industrial statistics, that the Act<sup>15</sup> providing for the census of 1830, approved March 23 of that year, lets that matter severely alone, and devotes its entire energy to obtaining the best possible account of the various classes of people in the country. The classification as to age is made more comprehensive and complete than ever before, dividing the white males and females into ages quinquennially up to twenty, and decennially up to one hundred; and returns are now made for the first time of the number of deaf and dumb and blind, in the two great classes of white and colored populations. As in the previous census, marshals are allowed only six months in which to make returns, but by an Act<sup>16</sup> of February 3, 1831, amendatory of the Act here discussed, delinquent assistants are allowed six months longer in which to report to marshals, and the latter are allowed until August 1, 1831, to make returns to the Secretary of State. In 1830 the date of enumeration was fixed on the first of June. Since in the previous cases the returns had been referred to August first of each decennial year, the interval between the fourth and the fifth censuses is really only nine years and ten months,—a fact that reduces the nominal rate of increase between 1820 and 1830 about two thirds of one per cent. Since 1830 the succession of censuses has taken place with exact intervals of ten years. We have noticed elsewhere the scarcity of the earlier volumes of the census; and Congress seems to have felt this need at a very early date, since the last section of the Act of 1830 appropriates \$2000 for the purpose of revising and publishing the results of the first four censuses. This money was little better than wasted, if we may believe a competent

<sup>14</sup> 7, viii; 7, Comp., 29; Encyc. Brit., V, 340.

<sup>15</sup> Statutes at Large, IV, 383.

<sup>16</sup> Statutes at Large, IV, 439.

authority. "So hastily and heedlessly was this work performed," says Francis A. Walker,<sup>17</sup> "that it must be regarded as absolutely valueless. Many pages of that republication would, by merely noting the necessary corrections, be almost as much disfigured as the worst proof of statistical matter ever seen in a printing-house." The Secretary of State was authorized to have 3,000 copies of the fifth census printed; and a resolution<sup>18</sup> of 1832 provided for the distribution of the books, one copy going as before to the several libraries and incorporated historical societies and athenæums.

The results of the fifth census are contained in a single large folio volume. The cost of this census was \$378,545.13.<sup>19</sup>

Thus far the census has not much exceeded the demands of the Constitution, and has aimed chiefly at a bare enumeration of the population with some details as to age and sex, and a few half-hearted and spasmodic attempts in the way of industrial statistics. There has been as yet nothing like an exhaustive and scientific collection, analysis, and classification of the facts of our social development. But the fifth decade of our history distinctly invited such a study, distinctly appealed to the statesman to call to his aid a systematic investigation of the principles and laws underlying our political, industrial, and social development. The decade that closed in 1840 was one of vast importance to the social scientist of this country. Immigration was just beginning to assume imposing dimensions and to give promise of its wonderful growth in the future; manufactures were springing up on every hand, bringing with them numberless economies of production; education, the press, and moral agencies kept equal pace with the general advance; in fine, the industrial, the political, and the social conditions of the modern world began to take definite shape in the fourth decade of this century.

Under these conditions Congress tried to make the sixth

<sup>17</sup> 9, I, xlv.

<sup>18</sup> Statutes at Large, IV, 606.

<sup>19</sup> 7, viii; 7, Comp., 29; Encyc. Brit., V, 340.



census more worthy of the name than the other attempts had been. An Act<sup>20</sup> of March 3, 1839, retained the population schedules of the previous census, with the same classification of age, sex, and color. Returns are made as before, of the deaf, the dumb, and the blind; and now are added columns showing the insane and the idiotic, at public or at private charge. Statistics of universities and colleges, of academies and schools, of students and scholars, and of scholars at public charge, are returned for the first time in 1840; and the earliest record of illiteracy is made at the same time, in a column showing the number of adult whites who cannot read and write. Another section of the Act instructs the marshals to take a census of all persons receiving pensions from the United States for revolutionary or military service, stating their names and ages. The attempt to get at the industrial statistics of the country, made in 1810 and 1820, and given up in 1830, is renewed at the sixth census; and the Secretary of State is instructed to prepare forms for collecting "such information in relation to mines, agriculture, ores, and manufactures, as will exhibit a full view of the pursuits, industry, and resources of the country." The enumeration by the original act was to commence on June 1, 1840, and to close within ten calendar months thereafter; but an Act<sup>21</sup> of February 26, 1840, limits this time to five calendar months. This period, however, proved to be insufficient for the slow-going methods of those days, and an Act<sup>22</sup> of January 14, 1841, made the date for the final statement of the returns, June 1, 1841. "Give an inch, he'll take an ell," says the old proverb; and even this respite was unequal to the deliberate ways of the marshals of 1840, for an Act<sup>23</sup> of September 1, 1841, grants a further extension of time to January 1, 1842. As in previous cases, the Secretary of State is empowered to have printed 10,000 copies of the aggregate returns received from the marshals; and an

<sup>20</sup> Statutes at Large, V, 331.

<sup>22</sup> Statutes at Large, V, 411.

<sup>21</sup> Statutes at Large, V, 368.

<sup>23</sup> Statutes at Large, V, 452.

amendatory Act<sup>24</sup> authorizes him to have printed 20,000 copies of a compendium of the census. A later resolution<sup>25</sup> provides for the distribution of these volumes, and directs that certain specified numbers of copies shall be deposited with each State. Another resolution<sup>26</sup> provides for colleges and literary institutions.

Remembering that the census of 1840 was taken practically with the antiquated and ineffective machinery provided in 1790, we must regard the results with a good degree of favor. The account of the population is more comprehensive and exact than at any previous period; and the industrial statistics, though deficient in classification and in tabular system, are yet of distinct service to the political inquirer of those days. Much of the value of any census must come from the sympathetic co-operation of the people examined; and in the first half of this century information was given much more reluctantly than now. No penalty was attached in 1840 to a refusal to comply with the requirements of the industrial investigation; and in some cases the people refused point-blank to answer the inquiries of the census-taker. A leading journal in the South asks, "Is this federal prying into the domestic economy of the people a precursor to direct taxes? Is nothing to escape its inquisitors or its tax-gatherers? Is it worthy of the dignity and high functions of the federal government to pursue such petty investigations?"<sup>27</sup>

The results of the sixth census are contained in four volumes, all published in 1841: a Compendium, a volume on Population, another on Industrial Statistics, and a fourth on Pensioners. The cost of the sixth census was \$833,370.95.<sup>28</sup>

The conditions of social and industrial development emphasizing the need of accurate and complete data for the work of the publicist and the legislator were realized, as we saw, in the decade 1830-1840; and these conditions were

<sup>24</sup> Statutes at Large, V, 452.

<sup>25</sup> Statutes at Large, V, 467.

<sup>26</sup> Statutes at Large, V, 648.

<sup>27</sup> 7, Comp., 12.

<sup>28</sup> 7, viii; 7, Comp., 29; Encyc. Brit., V, 340.

much intensified as the time for taking the seventh census approached. The success of the previous enumeration had quickened the public interest in the matter, and some time before the decennial year arrived the subject began to be agitated in Congress. In 1845 two very able reports were made in Congress, advocating the establishment of a statistical bureau; and a bill was introduced authorizing the Secretary of the Treasury to constitute an office for the purpose of collecting material relating to the great industrial interests of the country. Only a single clerk, however, was detached for this service, and the result of the movement was a failure. In 1848 preparations began to be made for the seventh census, when it was proposed to use again the schedule of 1840, omitting some of the minute and, as it was thought, objectionable inquiries, — some of the “petty investigations” that the Southern paper complained of. This would have been a move in the wrong direction, and statisticians, both in and out of Congress, protested. Mr. N. Capen of this State, and Mr. Shattuck, who had acquired valuable experience and statistical knowledge while working on the State census of Massachusetts, suggested the appointment of commissioners: “A Central Board of three persons, as Commissioners,” says Mr. Shattuck, “should be organized at Washington. . . . These men should be appointed, not for their political opinions, but for their scientific attainments and knowledge of the matters they are to investigate. They should have the whole management of planning and carrying into execution all matters relating to the Census.” The result of this movement was the passage of an Act<sup>29</sup> on March 3, 1849, creating a Census Board, made up of the Secretary of State, who had supervised the census since 1800, the Postmaster-General, who had charge of machinery vitally important to the census department, and the Attorney-General, whose legal service would be useful. This Board was charged with the duty of drafting such forms, schedules,

<sup>29</sup> Statutes at Large, IX, 402.

etc., as might be necessary for the full enumeration of the inhabitants of the United States and for "exhibiting a full view of the pursuits, industry, education, and resources of the country." On the same day that this Act was passed the Department of the Interior was established;<sup>30</sup> and the whole supervision of the census was transferred from the Department of State to the new department. Fearful, apparently, that the Census Board might not perform its mission in the best manner, the Senate, at the next session of Congress, appointed a special committee to prepare schedules and the like for the coming census. In addition to this several eminent statisticians — Mr. Shattuck, Dr. Chickering, Mr. Capen, Dr. Jarvis, and others — were invited to Washington for consultation with the Board.

All this preparatory work was utilized in the act<sup>31</sup> of May 23, 1850. This Act, designed to provide for subsequent censuses as well as for the seventh, was a more ambitious measure than any of its predecessors, and really marks an epoch in the history of the United States census. The law of 1850 creates a separate bureau in the Department of the Interior, with a single responsible head, known as the Superintendent of the Census. Instead of one or two schedules, with a few inquiries, as in previous cases, we now have six schedules with more than one hundred inquiries. The first schedule, entitled *Free Inhabitants*, contained several new and important features, and embraced the number of dwellings and families; a record of the name and surname of every free white person in the Union, with their sex, exact age, color (as black, white, or mulatto), nativity, condition (married or single), and their education (as attending school in the year, or over twenty years of age and unable to read and write); the deaf and dumb, blind, insane, idiotic, pauper, and convict classes, and the owners of real estate, are also noted. The second schedule, *Slaves*, includes the names of slave owners, a description by age, sex, and color

<sup>30</sup> Statutes at Large, IX, 395.

<sup>31</sup> Statutes at Large, IX, 428.

of slaves, number of fugitive and of manumitted slaves, the deaf and dumb, blind, insane, and idiotic, and the number of slave-houses. The third schedule, *Mortality*, opened up a field wholly new to the American census, giving the name, sex, age, color, place of birth, occupation, etc., of persons who had died within the previous year, the duration of sickness, and the cause of death. Remarks upon topography, etc., made by the enumerators, accompany the schedules. The fourth schedule, *Agriculture*, was a vast improvement over anything ever before attempted in this country in the same line, and included an account of the numbers of acres of land, improved and unimproved; of the value of farms and farming implements; of various kinds of live stock; of the production of leading cereals and other staples in the census year; of the value of animals slaughtered, etc. The fifth schedule, *Manufacturing Industry*, covered its field thoroughly, giving the name and location of every person or establishment producing articles to the annual value of \$500; the quantity, kind, and value of raw material used, including fuel; the kind of motive power; the average number of hands employed, with distinction of sex, and the rate of wages paid in the two classes; and the quantity, kind, and value of the annual product. The sixth schedule, *Social Statistics*, embraced several kinds of inquiries never before attempted in the census, and included the valuation of real and personal estate; the several kinds and amounts of taxes levied; complete details as to schools, libraries, newspapers and periodicals, and churches; and a final statement showing the value of the average crop, what crops are short, and to what extent.

The time within which the marshals might make their returns is limited by the Act of 1850 to five months; but the Secretary of the Interior was empowered to extend that time in the case of the Territories; and, as a matter of fact, the enumeration was not then, and never has been, completed within that time. Persons refusing to give informa-

tion to the marshal or to his assistant were subject to a fine of \$30; and in two or three cases it was necessary to call in the service of the district attorney to enforce the requisitions of the law. If no other law were passed providing for the taking of any subsequent census, such census was to be taken according to the provisions of this Act.

The results of the seventh census are contained in five volumes: a compendium, an abstract, a volume on Mortality, another on Manufactures (not published until 1859), and a large quarto of more than one thousand pages, containing the general results of the census. The cost of the seventh census was \$1,318,027.53.<sup>32</sup>

The history of the eighth census is briefly told. At the time when the law for the census of 1860 would naturally have been passed, Congress was taken up with more important matters; and, beyond providing<sup>33</sup> for the necessary clerical force and making the requisite appropriations, effected no legislation for the eighth census. This lack of special action, however, was of slight importance, for the statute of 1850, which, as we saw, greatly extended the scope of the census, and distinctly recognized the demands of statistical science in the arts of administration, was not a part of the organic law, and require, in the absence of other enactments, that for all time in the future, the census should be taken in accordance with the provisions of that law. The census of 1860, accordingly, was taken on the same plan as that of 1850. There were a few minor modifications, however, and the returns were fuller than ever before, giving us, as a Congressional committee declared, "the most complete census that any nation has ever had." In 1850, for the first time, the census returns were preceded by a commentary designed to bring into perspective the general results, and thus to facilitate a correct apprehension of the statistics; and in 1860 a somewhat detailed commentary, interpreting the returns of the census,

<sup>32</sup> This was up to September 30, 1853. Three or four subsequent appropriations increase this amount about \$11,000.—7, viii: 7. Comp., 29; Encyc. Brit., V, 140.

<sup>33</sup> Statutes at Large, XI, 428; XII, 14, 109, 132, 218, 696, 748, 749.

and pointing out its revelations, accompanies the various volumes. Fortunately for the interests of statistical science, the outbreak of the Civil War, which followed so closely the eighth decennial enumeration, in no way impaired the actual taking of the census; and the future statistician who shall seek to estimate the total cost of the Civil War will find in the volumes of the eighth census a complete statement of the condition of the country at just the time desired. In the compilation of returns, however, and in the detention of communications from the scattered agents of the census, the Rebellion had serious effects, and some volumes of the census were not published till 1866.

The results of the eighth census are contained in five volumes: a Preliminary Report, a volume on Population, another on Manufactures, another on Agriculture, and a final one on Mortality and Miscellaneous Statistics. The cost of the eighth census was \$1,917,540.<sup>34</sup>

Another epoch in the development of our subject is reached in the history of the ninth census: for the work done in preparation for the census of 1870, although coming to no immediate practical end, was not lost. Unless superseded by new legislation the law of 1850 would, as we have seen, come into force again by its own terms, on January 1, 1870. But this law, however great an improvement upon the earlier legislation, was antiquated in 1870, and was far from meeting the requirements of modern statistical science and the marvelous development of the American people. Under these conditions the House of Representatives, in the second session of the Forty-first Congress (1869-1870), appointed a committee to examine the subject of census legislation, and to report whether further legislation was required for the census of 1870. This committee was strongly organized, and did its work with remarkable fidelity. After making an elaborate investigation, and consulting a host of experts, the committee, through its chairman,

<sup>34</sup> *Encyc. Brit.*, V, 340.

Gen. Garfield, presented on January 18, 1870, a long report,<sup>35</sup> constituting by far the most valuable American state paper on the subject. After reviewing briefly the history of census-taking and of statistical inquiry in leading countries from the earliest period, including the fullest account anywhere obtainable of the American census, the Report goes on to examine the principal defects in the existing method of taking the census and in the inquiries prescribed in the schedules of the existing law. The committee believed that the work of taking the census should no longer be intrusted to the United States marshals; that too much time was allowed in taking the census and in publishing the results; that the existing method of taking population statistics was objectionable in many features; that the operations of the census office were not sufficiently confidential; that the rule of compensation was arbitrary, complicated, and of doubtful wisdom. After explaining and illustrating in great detail these criticisms of the existing law, the committee recommended for passage a bill appended to the Report, embodying the results of their investigation. Conscious of the lack, in this country, of a permanent statistical bureau, such as most foreign governments have, and recognizing the impossibility of getting statistical information except under cover of a decennial census, the framers of this bill introduced new schedules into the old system, and largely increased the number of inquiries. A more radical change was that made in the machinery of the census by which the work of taking the census was taken away from the United States marshals and intrusted to a newly-created organization, independent of all other government machinery.

The bill thus prepared by a well-equipped committee, and highly approved by the best statistical talent in the country, passed the House of Representatives triumphantly, with overwhelming majorities. The record of the bill in the Senate, however, forms a curious chapter in the history of

<sup>35</sup> House Reports, Second Session, Forty-first Congress, Vol. I, No. 3.



committee government, and is not flattering to the patriotism of the upper house. We need not enter here into the causes that served to defeat the measure in that body,—into the peculiar composition of the Senate committee to which the House bill was referred; into the singular apathy to the subject on the part of the Senate which led most of the men who mentioned the matter to preface their remarks with an apology for taking up the time of the Senate in that way; and to the parliamentary tactics by which the whole matter was delayed until the time arrived when the continuing clause in the Act of 1850 revived that Act and made it the law of the land.<sup>36</sup>

Although conducted thus by a law quite inadequate to the demands of the occasion, the ninth census of the United States at once took rank with the best achievements in this direction in any country. The writers of the article on the United States Census, in Johnson's Cyclopædia (Gen. Garfield and B. A. Hinsdale), declare that the "reports of the ninth census form one of the noblest contributions which any country has ever made to statistical science"; and Mr. Carroll D. Wright finds in the same work the "grandest specimen of the possibilities of classification which the world had seen."<sup>37</sup> Indeed, the failure of the House bill in the Senate, though an undoubted catastrophe, was yet an insuf-

<sup>36</sup> "After a considerable delay the committee met, and as its members knew nothing whatever about the subject, and as in such a company agreement would have been miraculous, they concluded their deliberation of half an hour, or thereabouts, by deciding to disagree. As a matter of course, Mr. Conkling disapproved the House bill. As a matter of course, Mr. Sumner thought Mr. Conkling too hasty; and, as any one might have expected, the other members took part against the House of Representatives and against Mr. Sumner. The matter then went before the Senate. Mr. Conkling, in an admirably clever speech, conclusively proved that there were difficulties in the way of every census, and that this special census was not without difficulties of a grave nature; that no census could possibly be perfect, and that this particular census would be imperfect; that there were objections to all bills for taking the census, and that there were several objections to the House bill; but that, in his own opinion, the law of 1850 was the best law that ever had been or that ever could be framed, and that he was opposed to any other law. Mr. Sumner then made a speech to prove that the law of 1850 was twenty years old, and that in the interval the world had moved forward," etc. *Nation*, Vol. X, p. 116. For an explanation of the defeat of this enlightened measure in the Senate, see *Nation*, as above; also *Journal of Social Science*, Vol. V, p. 71.

<sup>37</sup> *International Review*, Vol. IX, p. 406.

ficient barrier against the host of improvements made by the new administration in the Census Bureau. Of course, the machinery of the census office is of the first importance; but any system is infinitely perfectible with the right man in charge; and the ninth census of the United States illustrates well the comparative impotence of poor machinery as opposed to technical and executive ability. Important parts of Garfield's bill were saved, after all. Many changes were made by the Superintendent of the Census in the forms of inquiries, making them more definite and more easily understood. The slave schedule of the censuses of 1850 and 1860 having become happily obsolete, was replaced by an inquiry concerning the public debt of towns, cities, counties, and states. The fourteenth amendment added two columns to the population schedule, — one showing the number of male citizens in each State, of twenty-one years and upward; the other showing the number of such citizens whose right to vote is denied or abridged on other grounds than rebellion or crime. Inquiries were now instituted, for the first time, concerning the parentage of each person, thus making it possible to know the number of people born of foreign parents. The cartographic method of presenting statistical facts formed a striking feature of the ninth census, and there among the first places gave promise of its possibilities. Fourteen finely engraved maps illustrate the density and the distribution of the population, the illiteracy and the wealth of each section of the country, the geographic and the political divisions of the United States since 1790, the prevalence of leading diseases, and the range of five principal agricultural products.

The results of the ninth census, attained sooner and published earlier than ever before, are contained in four volumes: one on Population, another on Vital Statistics, a third on Industry and Wealth, and a Compendium. The cost of the ninth census was \$2,360,884.<sup>38</sup>

<sup>38</sup> *Encyc. Brit.*, V, 340.

The remarkable success of the ninth census in the face of so many difficulties, the large growth of the national life in all departments, and a natural desire at the completion of our first century to make up the balance sheet of the past, all conspired to render the tenth census of the United States a statistical enquiry of colossal dimensions. The first step toward this undertaking was the framing and the passage of an adequate law. However brilliant results the Superintendent of the ninth census had been able to achieve, notwithstanding grave inherent defects in the machinery provided, there was no doubt that the census law of 1850 was quite inadequate for the purposes of the tenth census. "It is not possible," says Francis A. Walker, "for one who has had such painful occasion as the present Superintendent to observe the workings of the census law of 1870 to characterize it otherwise than as clumsy, antiquated, and barbarous. The machinery it provides is as unfit for use in the census of the United States in this day of advanced statistical science as the smooth-bore, muzzle-loading queen's arm of the Revolution would be for service against the repeating rifle of the present time." Under these conditions the law of March 3, 1879, providing for the taking of the tenth census, alters radically the system hitherto in vogue. In the first place, the taking of the census is no longer intrusted to the United States marshals,—men who held office by political appointment, who had other duties to perform, and who, indeed, were originally selected for this work only because there seemed to be no other federal officers in the various States and Territories whose services were available. Under the new law the President, by and with the advice and consent of the Senate, was to appoint Supervisors, not to exceed one hundred and fifty in number, who were to subdivide their districts, and, with the consent of the Superintendent of the Census, to appoint enumerators. The law required the Supervisor to ignore political

preferences in appointing these enumerators, selecting them "without reference to their political or party affiliations."

Another important change in the law is found in section 18, which authorized the Superintendent of the Census, whenever he should deem it expedient, to withdraw the schedules for manufacturing and social statistics from the enumerators of the several subdivisions, charging the collection of these statistics upon experts and special agents, to be employed without respect to locality. This enlarged the scope of the census far beyond the simple idea of an instrument for collecting statistical material.

Throughout this sketch of census legislation we have seen efforts put forth, at various times, to shorten the period of enumeration. The tenth census was a great improvement, in this respect, over previous censuses, requiring the enumeration to be completed in fourteen days in places of 10,000 inhabitants or over, and within twenty-four days in all other places.

It is yet too soon, perhaps, to pass final judgment upon the work of the tenth census. Side by side with a host of newspaper attacks and other irresponsible criticism may be found enthusiastic praise from leading statisticians in all countries. Indeed, the bare list of contributors' names — names famous the world over, and in themselves a sufficient guarantee of the character of the work performed — is enough to discredit most of this criticism. A strange underestimate of the necessary appropriations, a consequent delay in the publication of results, and wholly unforeseen and quite fortuitous circumstances serve to explain the temporary disrepute attaching to one of the most successful efforts made by any country in the way of statistical and social science.

The results of the tenth census, so far as published, are contained in eighteen large quarto volumes and a compendium of two volumes. The latter and the first four volumes — on Population, Manufactures, Agriculture, and

Transportation — were published in 1883. In 1884 were published volumes V and VI, on the Cotton Culture of the United States; VII, Valuation, Taxation, and Public Indebtedness; VIII, Newspapers and Periodicals, Ship Building, Alaska and the Fur Seal Island; IX, Forest Trees of North America; X, Petroleum, Coke, Building Stones, and the Quarrying Industry. In the next year five volumes were published: XI, Mortality Statistics, Part I; XIII, Statistics and Technology of the Precious Metals; XIV, Mining Laws; XV, Production of Gold, Copper, Iron, and other useful metals; XVI, Water Power employed in Manufacturing. In 1886 three more volumes were added to the list: XII, Mortality Statistics, Part II; XVIII, Social Statistics of Cities, Part I; XX, Wages, Trades Unions, and Strikes. Volume XVII, Water Power, Part I; XIX, Social Statistics of Cities, Part II; XXI, Statistics of the Defective, Dependent, and Delinquent Classes; and XXII, Reports on Machinery used in Manufactures, are already stereotyped, and will be printed and bound whenever Congress shall make an appropriation for that purpose.

The cost of the tenth census, up to October 31, 1881, was \$3,860,068.67.<sup>39</sup>

The leading authorities used in the foregoing sketch are as follows: Statutes at Large; Johnson's New Universal Cyclopædia, Vol. I, p. 782 (James A. Garfield, B. A. Hinsdale, and F. A. Walker); Encyclopædia Britannica, Vol. V, p. 338 (F. A. Walker); House Reports, Second Session, Forty-first Congress, Vol. I, No. 3 (Garfield's Report); 7, xv, xvi; 7, Comp., 9-29; 8, Mortality, vi, xii; Lippincott's Magazine, Vol. XXII, p. 108 (Henry Stone); Nation, Vol. X, p. 116 (Henry Adams); International Review, Vol. IX, p. 405 (Carroll D. Wright); North American Review, Vol. CXXVIII, p. 393 (George Walker); North American Review, Vol. CXXXI, p. 135 (Charles F. Johnson); Quarterly Journal of Economics, Vol. II, p. 135 (F. A. Walker).

<sup>39</sup> 10, Comp., xlviii.